State Of California The Resources Agency of California

Memorandum

To: Chairman William Keese, Presiding Member
Commissioner, Authur H. Rosenfeld,
Associate Member

Date: June 27, 2003
Telephone: (916) 654-4206
File: 02-AFC-1

From: California Energy Commission - BILL PFANNER
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Subject: **STATUS REPORT FOR THE BLYTHE II ENERGY PROJECT (02-AFC-1)**

Energy Commission staff has prepared this status report to update the Committee on the Blythe II Energy Project's (BEP II) schedule and progress.

PROJECT DESCRIPTION

The BEP II Application for Certification (AFC) was filed on February 19, 2002. On July 17, 2002, the Commission found the AFC to be data adequate for the 12-month process. The project would be a nominally rated 520 MW combined-cycle power plant. BEP II would be located adjacent to the Blythe Energy Project I (BEP I) that was approved by the Energy Commission on March 21, 2001 and is currently completing construction. BEP II would consist of two Siemens Westinghouse V84.3a 170 MW combustion turbine generators (CTGs), one (1) 180 MW steam turbine generator and supporting equipment. The Western Area Power Administration has been identified as the interconnecting utility that will require a joint EIR/EIS environmental document.

UPDATE ON CRITICAL ISSUES

The review of the BEP II AFC is considerably behind schedule due to unresolved transmission line configuration issues and the lack of completed interconnection studies by the interconnecting utilities (Western, Southern California Edison (SCE), and Imperial Irrigation District (IID)). There are also disagreements between staff and the applicant on the potential for impacts to the Colorado River and water conservation measures. Additional time was spent by the staff and applicant on data requests and responses in an effort to secure information on these unresolved issues.

To date, staff has issued three rounds of data requests to the applicant. The applicant has provided responses to these data requests but in some cases information remains to be provided. Staff has conducted several Data Request-Data Response-Issue Resolution Workshops in Blythe, Ontario, and Sacramento and held many conference calls and meetings with the applicant (and transmission owning utilities) to resolve these complex issues. However, staff does not have sufficient information to prepare a Preliminary Staff Assessment (PSA). The main areas that we would like to update you on are, Transmission System Engineering, Water, and Air Quality.

Transmission System Engineering: Staff has worked closely with IID, SCE, Western, and the applicant to understand clearly how the Blythe II project will interconnect with each of these electric transmission systems. Specifically, we do not have an accurate project description of how the power generated at the Blythe II project will be interconnected to these systems and the potential downstream affects on these systems.

In November 2002, the applicant issued information on a draft Regional Transmission power flow study, analyzing the Blythe area's regional transmission system including the feasibility of selected transmission options to support the reliable interconnection of the 520 MW BEP II project. The study shows 8+ scenarios of transmission lines extending offsite from Blythe II project significantly differing from the original AFC application that stated that there would be no offsite transmission lines.

The Blythe II applicant has subsequently proposed an interconnection plan that would tie Blythe II to the Buck Boulevard Substation. This electrical configuration would not require the Energy Commission to take jurisdiction of the off-site transmission line. The IID has prepared a Draft EIS/EIR on a 118 mile 230 kV and 500kV transmission line connection from Devers Substation (owned by SCE) to a new Hobsonway substation (owned by IID). This new substation is directly adjacent to BEP II and BEP I projects and the interconnection configuration with these facilities and Buck Blvd. is unknown as the EIR/EIS did not describe this interconnection. Recently, the BEP II applicant applied to Western for a Buck Blvd. substation interconnection and interconnection study, which may take 6 months or longer to complete. We are also advised that SCE will be conducting a study to identify impacts in their system with an interconnection at Devers substation. No schedule for that study is available at this time.

Water: After three rounds of Data Requests, the applicant has not provided Energy Commission staff with information requested regarding the use of groundwater and a proposed Water Conservation Offset Plan. Staff's concern is that the BEP II project may contribute to a significant adverse cumulative impact on Colorado River Water, as the groundwater pumped by BEP II is part of the Colorado River's hydrologic recharge system. The applicant disagrees with this concern as they do not believe the groundwater is part of the Colorado River system. The applicant has proposed a voluntary Water Conservation Offset Plan, which is not part of their formal application and is not proposed as a mitigation measure for the BEP II project. With what may be a significant adverse cumulative impact to water resources, staff is looking into alternative water sources and cooling systems to be considered to mitigate this potential impact.

Air Quality: A preliminary Determination of Compliance (PDOC) was issued by the local air district on November 19, 2002. At the time of the PDOC, the full package of Emission Reduction Credits had not been identified and a Class 1 visibility analysis had not been completed. Those issues have been resolved but the final DOC has not been issued by the local air district.

Given the uncertainties that continue to delay the project schedule and the amount of time necessary to complete and secure the interconnection studies, staff believes it would be helpful if the BEP II Project Committee held a status conference to discuss these issues and the possibility of tolling the project schedule until the necessary transmission studies are completed and complete information identified in Attachment A is provided.

cc: Docket (02-AFC-1)
Proof of Service List

ATTACHMENT A

During a June 24, 2003 conference call, the applicant again stated that the project the Commission is being requested to analyze and eventually approve is a project with an interconnection at the Buck Blvd. (a substation owned by Western) per Figure 8 of the Applicant's response to Data Request 179. Staff intends to only analyze system reliability impacts and mitigation for that configuration.

The information below is required by staff to complete the PSA analysis of the Blythe II project. Although this information has been requested during previous phone calls, workshops, and data requests #227-232, much has not been provided. The information (in both hard and electronic copies) noted below should be provided for the new base cases that are closest to latest Figure 8 project configuration as identified in Appendices of the BART study.

1. A revised Executive Summary for the Power Flow study for 2006 summer peak case (refer to BART study SC4, Appendix V), 2006 spring peak case (refer to BART study SC5, Appendix X, study to be performed per Fig. 8 configuration) and any related sensitivity cases in this respect. The new Executive summary should be similar in format to the Executive Summary dated Feb, 2003 submitted by the Applicant, but not limited to Project Description, Conclusions, Study assumptions, and Analysis and Impacts. Discuss also the accuracy of the power flow modeling for BART SC4 base case with respect to Fig. 8 configuration and to the configuration mentioned in the EIS/EIR for the proposed Desert Southwest transmission line. This Power Flow Study would serve for the CEC staff at this stage as a preliminary screening and feasibility study, and would be subject to final analysis later.
2. Five hard copies of the revised Executive Summary and an electronic copy.
3. List all overload criteria violations for the system conditions as mentioned in Item 1 above in a Table format for N-0 (based on normal rating of the facilities) and N-1 & N-2 (based on emergency ratings of the facilities) contingencies. The Tables must include the contingency, overloaded element, the rating of the overloaded element, the loading of the overloaded element in MVA or amperes, and percentage in pre and post-project cases and their differences in percentages side by side with the selected mitigation (as shown in the previous Executive summary). The tables must also include all pre-project overloads.
4. Provide power flow diagrams (in MW, percentage loading, and per unit voltage) with and without BEP II for all base cases as mentioned in Item 1 above and sensitivity cases under normal conditions and for all overload criteria violations under N-1 and N-2 contingency conditions.
5. Mitigation for each overload criteria violation in the interconnecting or downstream facilities should be selected in concurrence with the respective transmission owner (provide letter if possible at this stage) and where, applicable from Cal-ISO verifying the rationale and feasibility of the mitigation measure and its implementation prior to on-line date of BEP II.
6. For any mitigation measure selected per item 5 above that would include new or modified downstream facilities including reconductoring, and for the purpose of

environmental impacts, provide a full description of the project with one-line diagrams, plans and profiles showing pre and post-project facilities. Where new or modified linear facilities are proposed outside a substation fence line, provide in consultation with the transmission owner the routes, construction methods, environmental settings, environmental impacts and recommended mitigation measures to offset any adverse environmental impacts.

7. Provide electronic copies of the GE PSLF Power flow pre and post-project including all base cases and sensitivity cases as stated in Item 1 above (*.sav & *.drw files) and EPCL or Autocon contingency (for N-1 and N-2) files. Provide also a hard copy of the list of contingencies evaluated.
8. Provide a copy of the applicant's interconnection study and termination request to Western, and the study plan and schedules for the interconnection with the Western system at Buck Blvd substation.
9. Provide the study plan by IID and SCE including schedules for their studies and facilities construction.
10. With respect to finalization of interconnecting facilities for BEP II and for transmitting power from BEP I and BEP II, provide the following:
    a) Layout plan and one line diagrams for the BEP II switchyard, Buck Blvd. Substation, Coachella or Dillon Road switchyard/substation, and Devers Substation with proposed equipment (transformers, breakers, etc) and ratings in concurrence with the respective transmission owner,
    b) Describe the 500 kV transmission line that would emanate from Western's Buck Boulevard Substation and ultimately connect via a new Coachella 500 kV bus to the SCE Devers Substation. The description should include the purpose of the Dillon Road switchyard/substation and the Hobsonway switchyard/substation, and whether these or other facilities are to be utilized to transmit Blythe I and Blythe II power.
11. Cal-ISO review and comment on Items 1-9 above.

In addition, for the Final Staff Assessment, the following additional information is needed:

1. Completed interconnection study by SCE.
2. Completed interconnection study by Western.
3. Completed interconnection study by IID.
4. Review and comment by the Cal-ISO on the SCE, Western, and IID interconnection studies.
5. Finalization of the layout plan and schedules for interconnecting facilities power from BEP I and BEP II.